

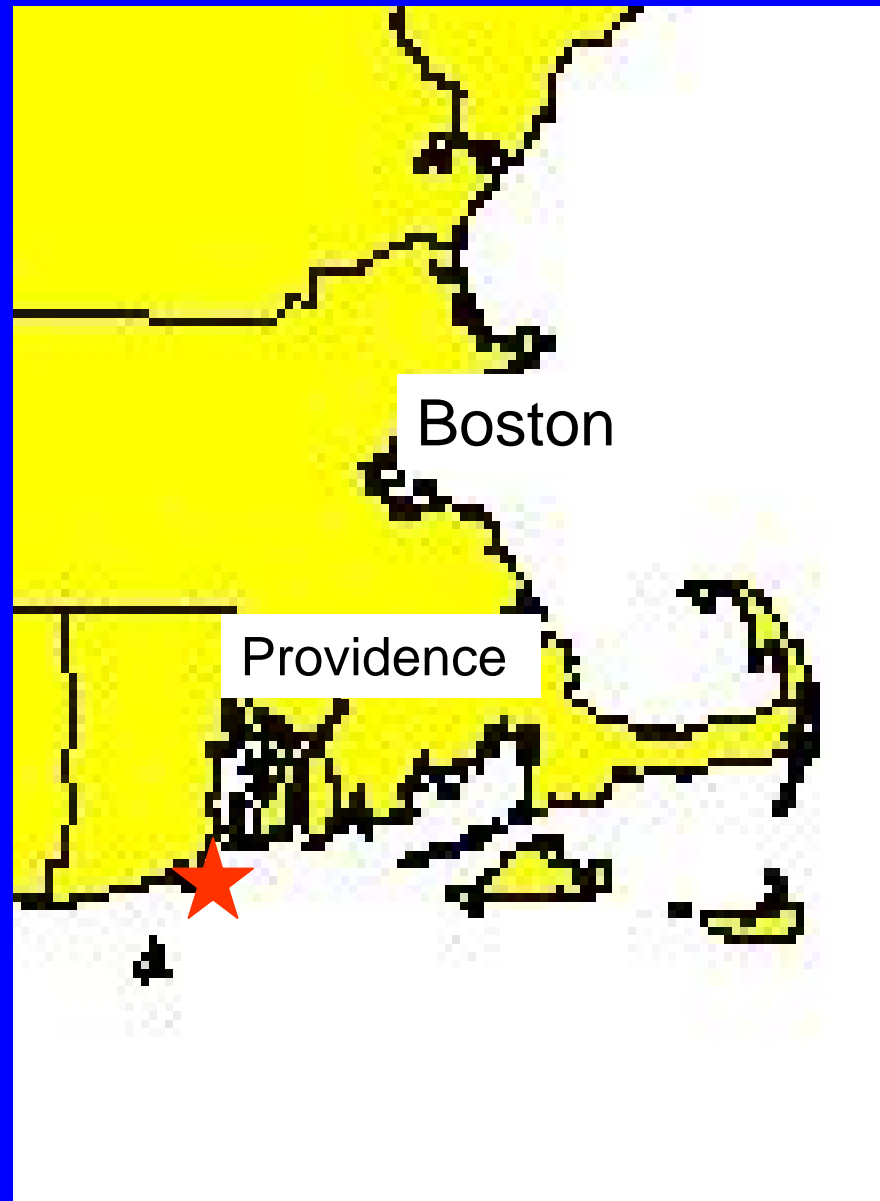
# Galilee Salt Marsh Restoration Project - Section 1135



Ecosystem Restoration Opportunities  
Associated with Other Initiatives

Larry Oliver - New England District

# Project Location



# Galilee Salt Marsh

Unconfined  
Disposal Site

Confined  
Disposal Site

Existing Salt  
Marsh

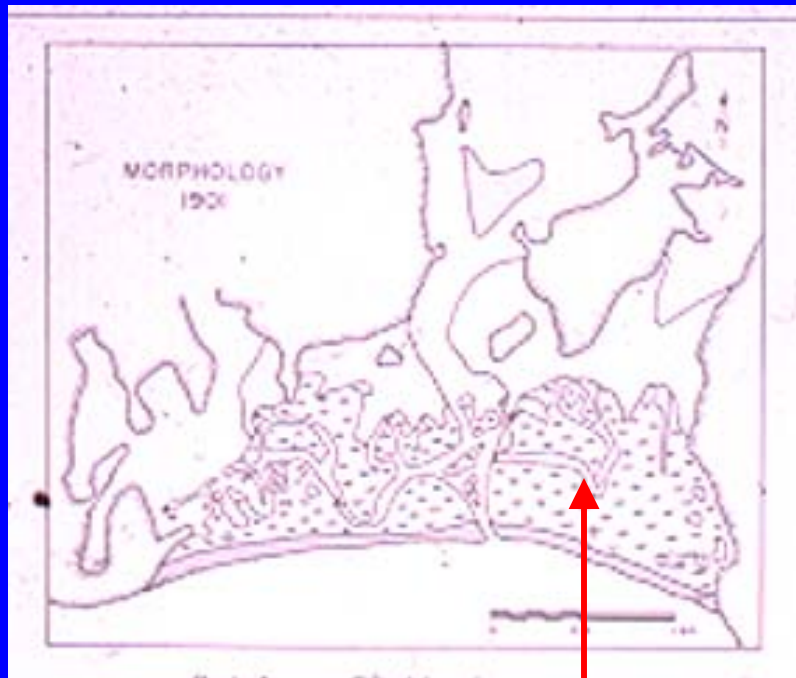
Galilee Escape  
Road

Existing  
Culverts

Flooding  
Concerns



# CRMP Historic Conditions & Impacts



# Pre-Construction Project Site & Project Elements



## “Other Initiatives”

- Highlighted as area for restoration in the State CZM Salt Pond Special Area Management Plan
- Priority Focus Area in the North American Waterfowl Management Plan - Atlantic Coast Joint Venture
- Coastal America Regional Focus Area



# Coastal America Partners

- Corps of Engineers
- RI Division of Fish and Wildlife
- RI Department of Transportation
- RI Department of Environmental Management
- RI Coastal Resources Management Council
- U.S. Fish and Wildlife Service
- U.S. Environmental Protection Agency
- Ducks Unlimited
- University of Rhode Island
- Save the Bay
- Town of Narragansett

# “Some Other Initiatives”

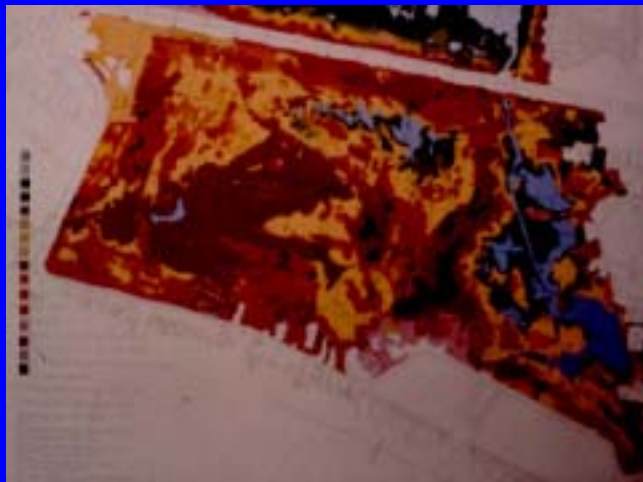
- RIDOT Mitigation for Section 404 and Local Permits - Support for Others
- Corps Wetland Research Program
- Pittman - Robertson Federal Wildlife Aid
- Ducks Unlimited Funding Contribution
- EPA Section 319 Grant
- Volunteer Planting Effort
- USFWS Equipment Loan



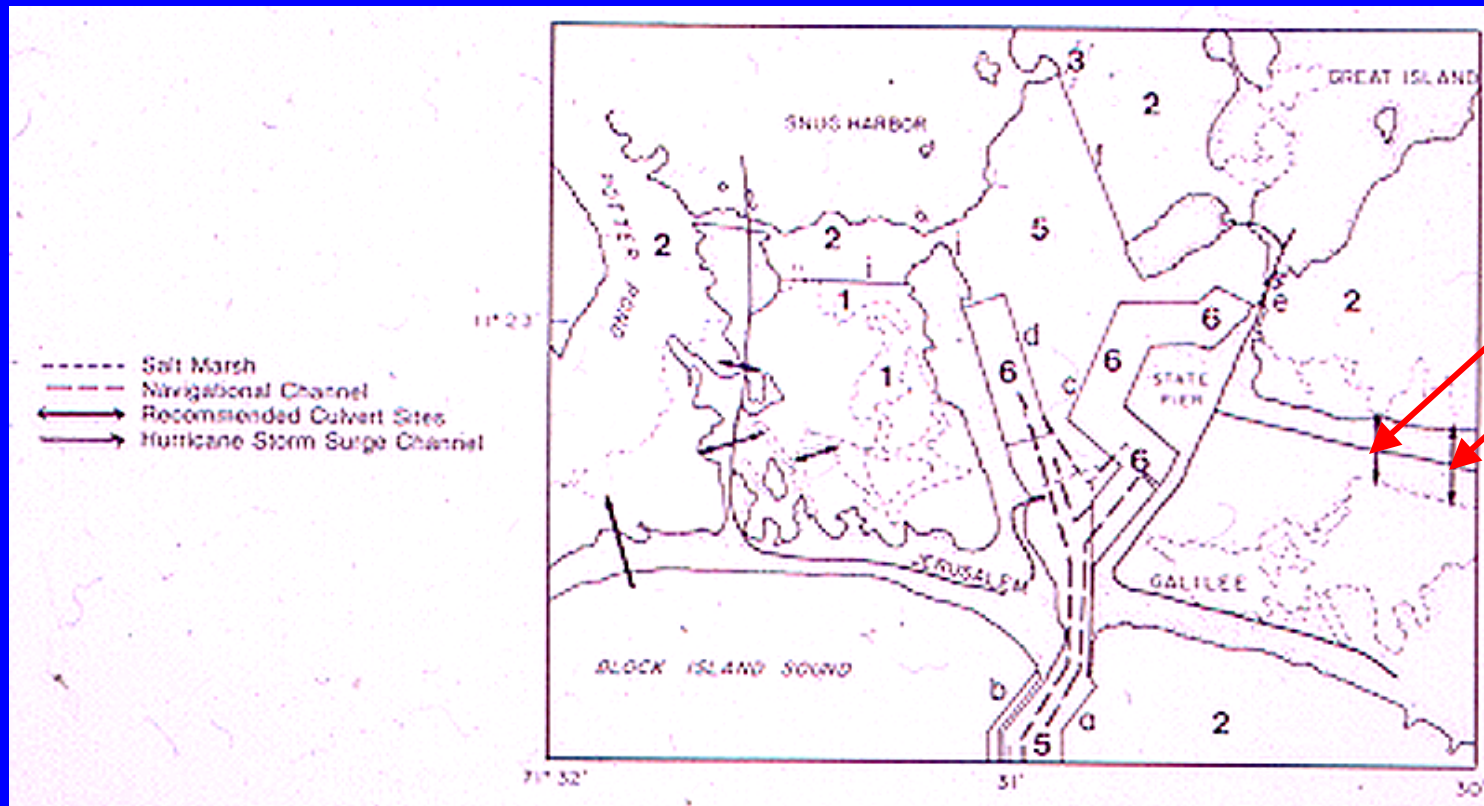
# Elevation Survey



# URI Monitoring Grid



# CRMP SAM Plan - Culvert Locations





# Galilee Road



# Culverts Prior to Construction



# Downstream Side of Culverts





# SRT Gates Open Position



# SRT Gates Closed Position





# Survey During Construction



# Graded West Side During Construction



# Channel Construction





# Channel Construction



# Vegetation Stockpile



# Volunteer Planting Effort





# Planted Vegetation September 1997



# Vegetation July 2000





# Vegetation July 2000



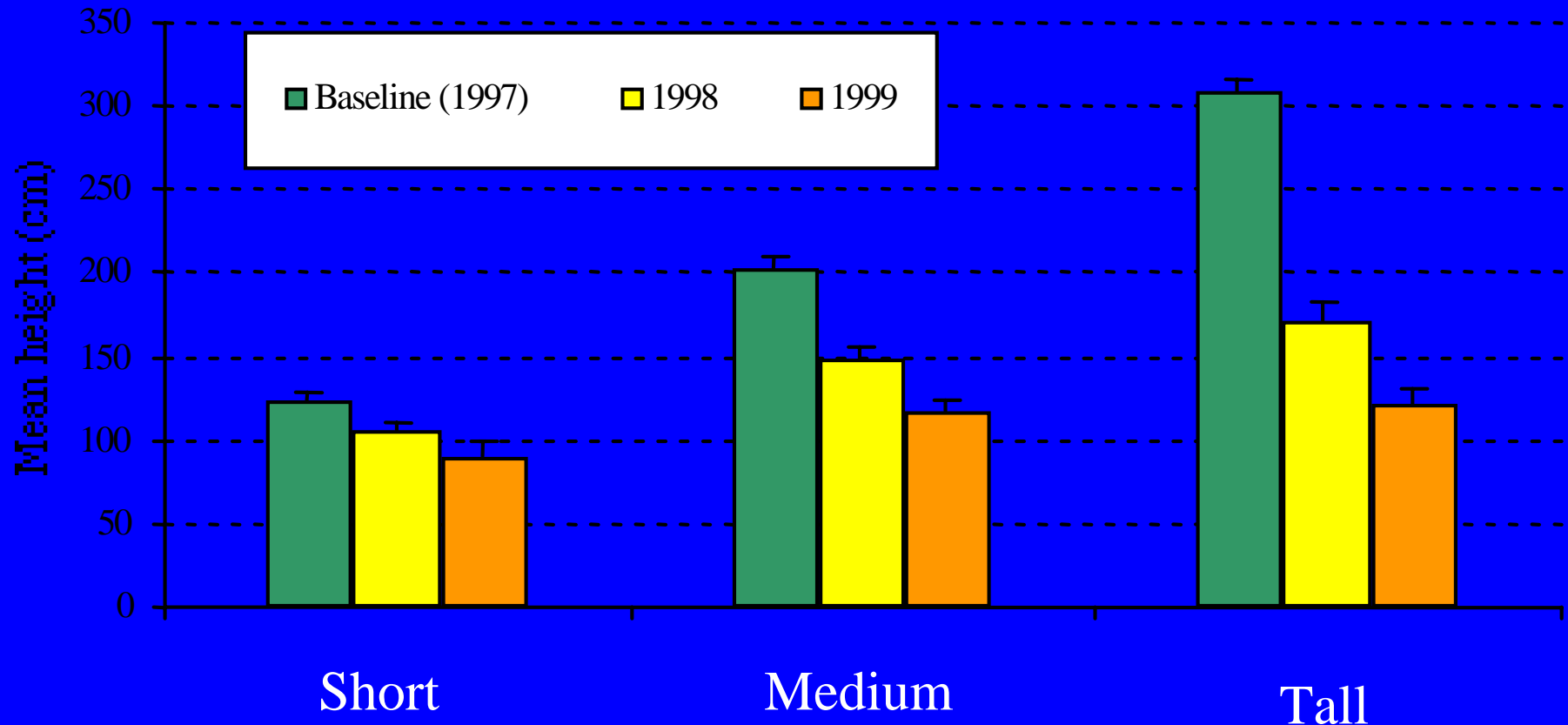
# Low Ground Pressure Excavator



# Post-Construction Site View

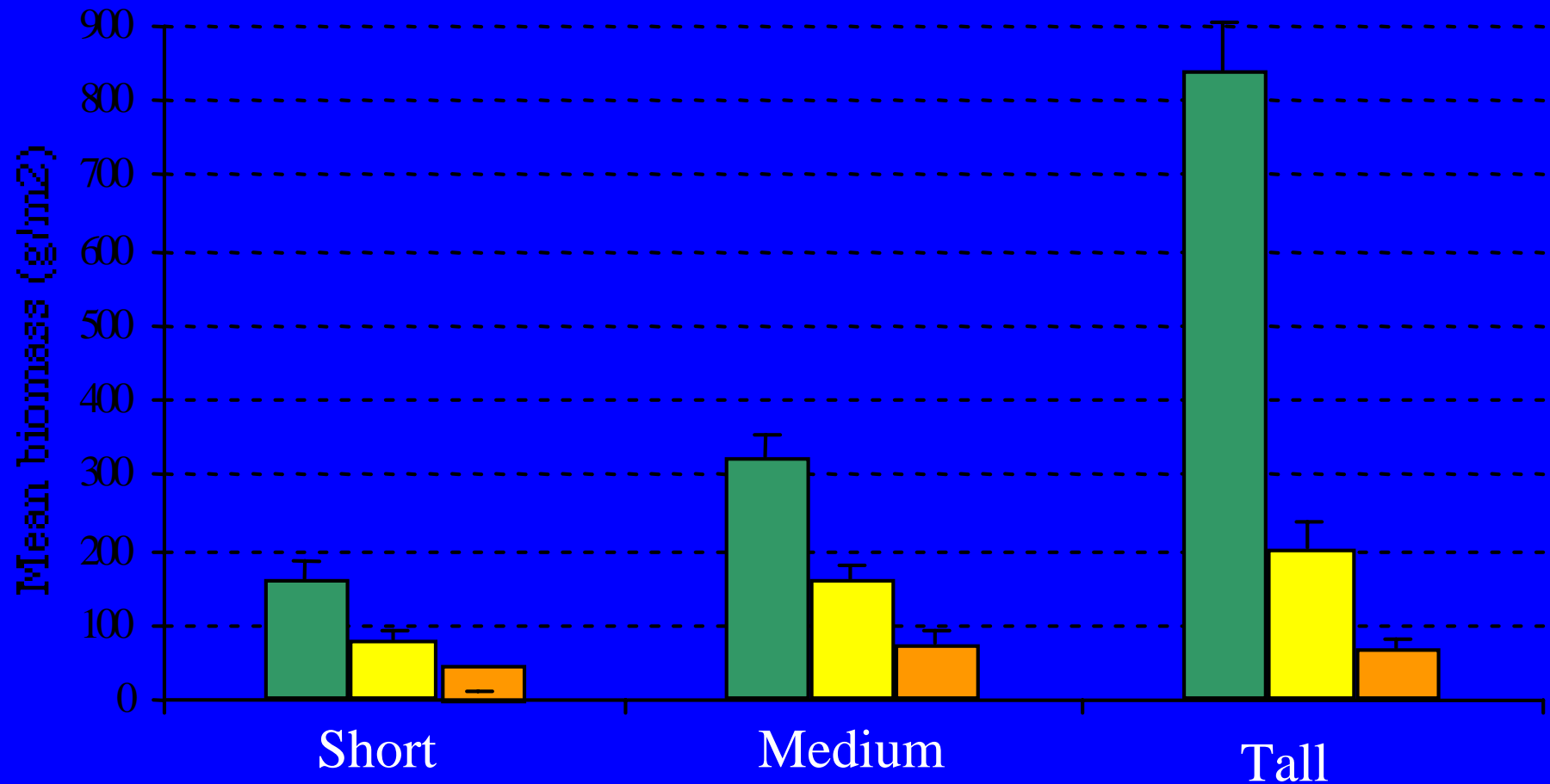


# Results - *Phragmites* Height



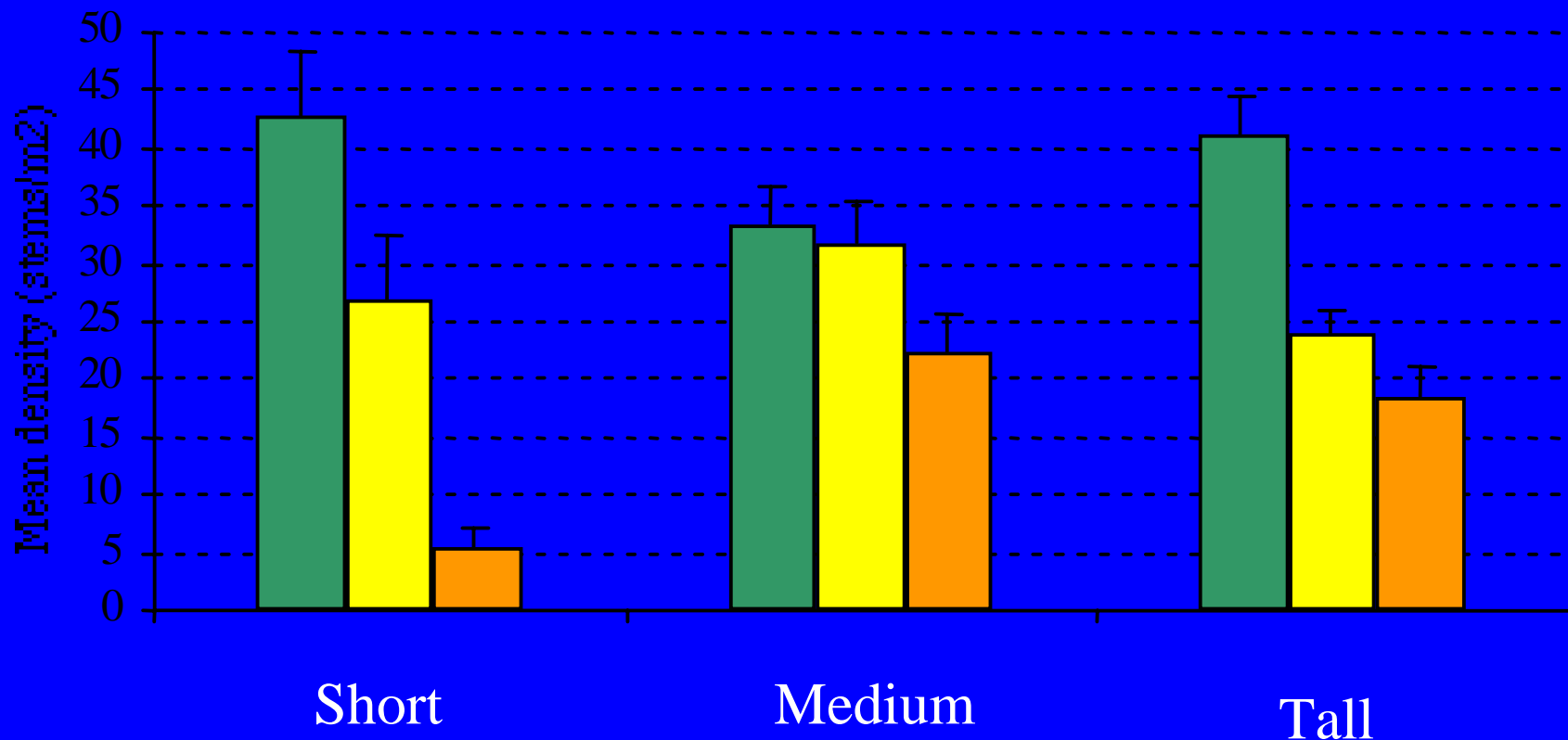
Height of *Phragmites australis* from Sanctuary habitats before (1997) and after (1998 and 1999) the restoration of tidal flow (Courtesy of University of Rhode Island).

# Results - *Phragmites* Biomass



Biomass of *Phragmites australis* from Sanctuary habitats before (1997) and after (1998 and 1999) the restoration of tidal flow (Courtesy of University of Rhode Island).

# Results - *Phragmites* Density



Density of *Phragmites australis* from Sanctuary habitats before (1997) and after (1998 and 1999) the restoration of tidal flow (Courtesy of University of Rhode Island).

# Questions



8 28 03